CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending
- Before this Amendment: Claims 1-47.
- After this Amendment: Claims 1-47.

Non-Elected, Canceled, or Withdrawn claims: None.

Amended claims: 1, 17-31, 39, and 42.

New claims: None.

Claims:

1.   **(Currently Amended)** A method comprising:

using a system definition model in a development phase of a system to design [[a]] the system;

subsequently using the system definition model in a deployment phase of the system to deploy the system on one or more computing devices; and

after deployment of the system, using the system definition model in a management phase of the system to manage the system deployed on the one or more computing devices.

2.   **(Original)** A method as recited in claim 1, wherein the system comprises an application.

3.   (Original) A method as recited in claim 1, wherein the system comprises an environment.

4.   (Original) A method as recited in claim 1, further comprising:

using knowledge obtained during management of the system to design a subsequent version of the system.

5.   (Original) A method as recited in claim 1, wherein the system definition model includes knowledge describing how to deploy the system on the one or more computing devices.

6.   (Original) A method as recited in claim 1, wherein the system definition model includes knowledge describing how to deploy the system on multiple different computing devices, and wherein the knowledge includes different knowledge describing how to deploy the system on each of the multiple different computing devices.

7.   (Original) A method as recited in claim 1, wherein the system definition model includes constraints that must be satisfied by the one or more

computing devices in order for the system to be run on the one or more computing devices.

8. **(Original)** A method as recited in claim 7, wherein the system definition model can be used to check whether the constraints are satisfied by the one or more computing devices during design of the system.

9. **(Original)** A method as recited in claim 7, wherein the system definition model can be used to check whether the constraints are satisfied by the one or more computing devices during design of the system and during management of the system.

10. **(Original)** A method as recited in claim 1, wherein the system definition model includes knowledge describing how to manage the system after deployment of the system.

11. **(Original)** A method as recited in claim 1, further comprising:

during management of the system, using a flow to automatically propagate a configuration change to the system.

12. (Original) A method as recited in claim 1, wherein the system is deployed to an environment on the one or more computing devices, the method further comprising, prior to the design, deployment, and management of the system:

using another system definition model to design the environment;

subsequently using the other system definition model to deploy the environment on the one or more computing devices; and

after deployment of the environment, using the other system definition model to manage the environment deployed on the one or more computing devices.

13. (Original) A method as recited in claim 12, wherein the system definition model for the environment is derived through examination of the configuration of one or more computing devices.

14. (Original) A method as recited in claim 12, wherein the system definition model includes constraints that must be satisfied by the environment in order for the system to be run on the one or more computing devices, and wherein the other system definition model includes other constraints that must be satisfied by the system in order for the system to be run on the one or more computing devices.

15.   (Original) A method as recited in claim 1, wherein a plurality of environments are deployed on the one or more computing devices, the method further comprising:

using a plurality of different system definition models to design each of the plurality of environments, wherein each of the plurality of environments is associated with one of the plurality of different system definition models;

using, for each environment, the associated one of the plurality of different system definition models to deploy the environment; and

after deployment, using, for each environment, the associated one of the plurality of different system definition models to manage the environment.

16.   (Original) A method as recited in claim 15, wherein each of the plurality of environments is layered, and wherein each of the plurality of environments serves as environment to one other of the plurality of environments or to the system.

17.   (Currently Amended) One or more computer readable storage media having stored thereon a plurality of instructions that implement a schema, wherein the plurality of instructions, when executed by a processor, cause the processor to:

use a system definition model in a development phase of a system to design the system;

subsequently use the system definition model in a deployment phase of the system to deploy the system on one or more computing devices; and

after deployment of the system, use the system definition model in a management phase of the system to manage the system deployed on the one or more computing devices ~~facilitate design of a system;~~

~~facilitate deployment of the system; and~~

~~facilitate management of the system~~.

18.   (Currently Amended) One or more computer readable storage media as recited in claim 17, wherein the system comprises an application.

19.   (Currently Amended) One or more computer readable storage media as recited in claim 17, wherein the system comprises an environment.

20.   (Currently Amended) One or more computer readable storage media as recited in claim 17, wherein the ~~to facilitate deployment of the system~~

~~is to include, in a~~ system definition model~~[[,]]~~ <u>includes</u> knowledge describing how to deploy the system.

21. **(Currently Amended)** One or more computer readable <u>storage</u> media as recited in claim 17, wherein ~~to~~ <u>the to</u> ~~facilitate deployment of the system is to include, in a~~ system definition model~~[[,]]~~ <u>includes</u> knowledge describing how to deploy the system in multiple different environments, and wherein the knowledge includes different knowledge describing how to deploy the system in each of the multiple different environments.

22. **(Currently Amended)** One or more computer readable <u>storage</u> media as recited in claim 17, wherein <u>the</u> ~~to facilitate design of the system is to include, in a~~ system definition model~~[[,]]~~ <u>includes</u> constraints that must be satisfied by an environment in order for the system to be run in the environment.

23. **(Currently Amended)** One or more computer readable <u>storage</u> media as recited in claim 22, wherein to <u>use the system definition model to deploy the system</u> ~~facilitate design of the system~~ is to use the system definition model to check whether the constraints are satisfied by the environment during design of the system.

24. (Currently Amended) One or more computer readable ~~storage~~ media as recited in claim 17, wherein ~~the to facilitate management of the system is to include, in a~~ system definition model[[,]] ~~includes~~ knowledge describing how to manage the system.

25. (Currently Amended) An apparatus ~~that implements a schema~~ comprising:

a processor;

means operable by the processor for using a system definition model in a development phase of a system to design the system;

means operable by the processor for subsequently using the system definition model in a deployment phase of the system to deploy the system on one or more computing devices; and

means operable by the processor for, after deployment of the system, using the system definition model in a management phase of the system to manage the system deployed on the one or more computing devices

~~means for facilitating design of a system;~~

~~means for facilitating deployment of the system; and~~

~~means for facilitating management of the system.~~

26.   **(Currently Amended)** An apparatus as recited in claim 25, wherein the ~~means for subsequently using the system definition model in a development phase~~ ~~means for facilitating deployment of the system~~ comprises means for including, in [[a]] the system definition model, knowledge describing how to deploy the system.

27.   **(Currently Amended)** An apparatus as recited in claim 25, wherein the ~~means for subsequently using the system definition model in a development phase~~ ~~means for facilitating deployment of the system~~ comprises means for including, in [[a]] the system definition model, knowledge describing how to deploy the system in multiple different environments, and wherein the knowledge includes different knowledge describing how to deploy the system in each of the multiple different environments.

28.   **(Currently Amended)** An apparatus as recited in claim 25, wherein the ~~means for using the system definition model in a development phase of a system~~ ~~means for facilitating design of the system~~ comprises means for including, in [[a]] the system definition model, constraints that must be satisfied by an environment in order for the system to be run in the environment.

29.   (Currently Amended) An apparatus as recited in claim 28, wherein the ~~means for using the system definition model in a development phase of a system~~ ~~means for facilitating design of the system~~ comprises means for using the system definition model to check whether the constraints are satisfied by the environment during design of the system.

30.   (Currently Amended) An apparatus as recited in claim 25, wherein the ~~means for using the system definition model in a management phase of the system~~ ~~means for facilitating management of the system~~ comprises means for including, in [[a]] the system definition model, knowledge describing how to manage the system.

31.   (Currently Amended) A system comprising:

a processor; and

a plurality of executable instructions which, when executed by the processor, perform operations comprising:

using a system definition model to design an application, the system definition model being applicable across a lifecycle of the application, wherein the lifecycle of the application includes design of the application, deployment of the application, and management of the application;

subsequently using the system definition model to deploy the application on one or more computing devices; and

after deployment of the application, using the system definition model to manage the application deployed on the one or more computing devices;

wherein the system further includes ~~a system definition model applicable across a lifecycle of an application, wherein the lifecycle of the application includes design of the application, deployment of the application, and management of the application; and~~ a schema to dictate how functional operations within the system definition model are to be specified.

32. **(Original)** A system as recited in claim 31, wherein the system definition model includes information describing how to deploy the application.

33. **(Original)** A system as recited in claim 31, wherein the system definition model includes information describing how to deploy the application in multiple different environments, and wherein the information includes different information describing how to deploy the application in each of the multiple different environments.

34.   (Original) A system as recited in claim 31, wherein the system definition model includes constraints that must be satisfied by an environment in order for the application to be run in the environment.

35.   (Original) A system as recited in claim 34, wherein the system definition model can be used to check whether the constraints are satisfied by one or more computing devices in the system during design of the application and during management of the application.

36.   (Original) A system as recited in claim 34, wherein the system definition model can be used to check whether the constraints are satisfied by the environment during design of the application.

37.   (Original) A system as recited in claim 31, wherein the system definition model includes information describing how to manage the application.

38.   (Original) A system as recited in claim 31, wherein the system further comprises:

another system definition model applicable across a lifecycle of an environment, wherein the lifecycle of the environment includes design of the

environment, deployment of the environment, and management of the environment; and

wherein the schema is further to dictate how functional operations within the other system definition model are to be specified.

39. **(Currently Amended)** A system as recited in claim 38, wherein the system definition model for the environment is derived through examination of the configuration of one or more computing devices.

40. **(Original)** A system as recited in claim 38, wherein the system definition model includes constraints that must be satisfied by the environment in order for the application to be run on the environment, and wherein the other system definition model includes other constraints that must be satisfied by the application in order for the application to be run on the environment.

41. **(Original)** A system as recited in claim 38, wherein the system further comprises:

an additional system definition model applicable across a lifecycle of an additional environment, wherein the lifecycle of the additional environment includes design of the additional environment, deployment of the additional environment, and management of the additional environment;

wherein the additional environment is layered below the environment; and

wherein the schema is further to dictate how functional operations within the additional system definition model are to be specified.

42.   (Currently Amended) A method comprising:

using a system definition model in a development phase of a system to design the system, the system definition model being specific to the system, wherein the system comprises an application;

subsequently using the system definition model in a deployment phase of the system to deploy the system on one or more computing devices;

after deployment of the system, using the system definition model in a management phase of the system to manage the system deployed on the one or more computing devices;

prior to the design, deployment, and management of the system,

using another system definition model to design an environment, wherein the system is deployed to the environment on the one or more computing devices;

subsequently using the other system definition model to deploy the environment on the one or more computing devices; and

after deployment of the environment, using the other system definition model to manage the environment deployed on the one or more computing devices;

wherein the system definition model includes constraints that must be satisfied by the environment in order for the system to be run on the one or more computing devices, and wherein the other system definition model includes other constraints that must be satisfied by the system in order for the system to be run on the one or more computing devices

~~defining an instance of a system definition model that is used during design of a system, as well as in conjunction with a system definition model runtime during deployment and management of the system.~~

43.   (Original) A method as recited in claim 42, wherein the system definition model includes information describing how to deploy the system.

44.   (Original) A method as recited in claim 42, wherein the system definition model includes information describing how to deploy the system in multiple different runtimes, and wherein the information includes different information describing how to deploy the system in each of the multiple different runtimes.

45. **(Original)** A method as recited in claim 42, wherein the system definition model includes constraints that must be satisfied by the runtime in order for the system to be run in the runtime.

46. **(Original)** A method as recited in claim 45, wherein the system definition model can be used to check whether the constraints are satisfied by the runtime during design of the system.

47. **(Original)** A method as recited in claim 42, wherein the system definition model includes information describing how to manage the system in the runtime.